

REMARKS

Applicants hereby add new claims 22-30. Accordingly, claims 1-30 are pending in the present application.

Claims 1-3, 7, 9-12, 16, and 18 stand rejected under 35 USC 102(b) for anticipation by U.S. Patent No. 6,028,674 to Tognazzini et al. Claim 21 stands rejected under 35 USC 103(a) for obviousness over U.S. Patent No. 6,672,695 to Naka et al. in view of U.S. Patent No. 5,937,225 to Samuels. Claims 5 and 14 stand rejected under 35 USC 103(a) for obviousness over Tognazzini in view of Naka. Claims 6 and 15 stand rejected under 35 USC 103(a) for obviousness over Tognazzini in view of Naka. Claims 8 and 17 stand rejected under 35 USC 103(a) for obviousness over Tognazzini in view of Naka. Claim 19 stands rejected under 35 USC 103(a) for obviousness over Tognazzini in view of Naka. Claims 4 and 13 stand rejected under 35 USC 103(a) for obviousness over Tognazzini in view of U.S. Patent No. 6,035,295 to Klein. Claim 20 stands rejected under 35 USC 103(a) for obviousness over Tognazzini in view of Naka and Klein.

Applicants respectfully traverse the rejections and urge allowance of the present application.

Referring to the objection to the drawings, Applicants respectfully refer the Office to paragraph 0029 of the originally-filed specification wherein the image forming system is referred to with reference "10" with respect to the drawings. For consistency, Applicants hereby amend the specification to add reference 10 to paragraph 0016 of the specification. Applicants respectfully request withdrawal of the objection to the drawings and approval of the amendment to the specification.

Referring to the anticipation rejections, Applicants note the requirements of MPEP §2131 (8<sup>th</sup> ed., rev. 2), which states that TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY ELEMENT OF THE CLAIM. The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Applicants respectfully submit the claims recite limitations not disclosed by the prior art and the anticipation rejections are in error for at least the following reasons.

Referring to independent claim 1, the Office at page 3 of the Office Action

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identifies teachings of step 620 as allegedly disclosing the claimed performing prediction operations with respect to the consumable to predict a likelihood that an image job will be imaged. The teachings of Figs. 4 and 6 of Tognazzini fail to disclose or suggest teachings regarding predicting a likelihood that an image job will be imaged as positively claimed. To the contrary, the methods of Figs. 4 and 6 state that a threshold number of pages for an ink cartridge is obtained and the image forming device compares the number of pages printed to the threshold and then selectively calls a routine of Fig. 6 at step 470 to determine whether printing is adequate or not. As illustrated in the method of Fig. 4, the job is already printed at step 430 and the analysis with respect to the consumable and the threshold occurs after the print job is printed at step 460. The teachings of Tognazzini refer to performing prediction operations after the job has been imaged and are void of any teaching or suggestion of predicting a likelihood that an image job will be imaged as recited in claim 1. In fact, there is no job present to be imaged at step 470 when the routine of Fig. 6 is called.

Further with respect to claim 1, the processing circuitry is configured to receive a change of use indication with respect to the consumable and to modify the prediction operations responsive to the change of use. The Office on page 3 of the Action recites the changing of the cartridge as allegedly disclosing the change of use indication with respect to the consumable. Applicants respectfully submit that replacement of an expended consumable cartridge may in no fair interpretation be considered to disclose or suggest use of a consumable or a change of use of a consumable as claimed. Replacement of a consumable is not use of the consumable or a change of use indication. The reception of the change of use indication and the modification of prediction operations responsive to the change of use are not disclosed nor suggested by the prior art and claim 1 is allowable for this additional reason.

The claims which depend from independent claim 1 are in condition for allowance for the reasons discussed above with respect to the independent claim as well as for their own respective features which are neither shown nor suggested by the cited art.

For example, referring to claim 2, it is defined that memory stores *predictive data* and the processing circuitry accesses the *predictive data* to perform *prediction operations*. The Office relies upon inherency in support of the rejection of claim 2 with respect to the claimed memory and has identified thresholds and counters as apparently

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disclosing the predictive data inasmuch as it is stated that thresholds and counters are inherently stored in memory. Applicants respectfully submit that the statements by the Office illustrate the erroneous nature of the rejection of both claims 1 and 2. For example, the Office on page 3 of the Action identifies resetting of *data of a print counter* of step 420 of Fig. 4 of Tognazzini as allegedly disclosing modifying a *prediction operation* which is inconsistent to the position that counters and thresholds are predictive data set forth with respect to the rejection of claim 2.

If the rejection of claims 1 and 2 is maintained, Applicants respectfully request clarification of the rejection of the claims so Applicants may appropriately respond. In particular, Applicants respectfully request identification of the Tognazzini teachings by reference numbers or other specific reference in a non-final action which allegedly disclose the *predictive operation*, a *predictive operation modified responsive to the change of use*, and the *predictive data* so Applicants may respond. In particular, 37 C.F.R. §1.104(c)(2) provides that *the pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified*. Further, 37 C.F.R. §1.104(c)(2) states that the Examiner must cite the best references at their command. *When a reference is complex or shows or describes inventions other than that claimed by Applicants, the particular teachings relied upon must be designated as nearly as practicable*. Applicants respectfully request clarification of the rejections with respect to specific references and specific reference teachings therein pursuant to 37 C.F.R. §1.104(c)(2) in a non-final Action if the claims are not found to be allowable.

Referring to the rejection of claim 5, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See, e.g., MPEP §2143 (8<sup>th</sup> ed., rev. 2). Applicants respectfully submit there is no motivation to combine the reference teachings and the rejection of claim 5 is allowable for at least this reason.

More specifically, the Office states that the combination of references is proper to allow information used in applications to be used in multiple printers. In support of the motivation, the Office relies upon teachings of Naka. Applicants respectfully submit

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that the reliance is misplaced. Initially, the Office has identified no teachings in Tognazzini that the reference is concerned with usage of a cartridge in multiple printers or that multiple printers need to share information to motivate one to look for alternatives or additional teachings regarding sharing consumable cartridges. The motivation recited in Naka is particular to the Naka invention and fails to provide proper motivation to modify the teachings of Tognazzini. More specifically, no problem is solved or improved solution provided to the teachings of Tognazzini by the combination proposed by the Office. The 103 rejection is improper without proper motivation.

Applicants also note that on page 3 of the Action with respect to the rejection of claim 2, the Office states that *memory is inherent to the printer* to complete the necessary steps. Accordingly, the Office has admitted that suitable memory is inherently in the printer. It is unreasonable for the Office now to state with respect to claim 5 that it is obvious to provide the memory located upon the consumable as claimed *in view the statements by the Office that it is inherent for the printer to include memory*. The Office has failed to demonstrate that any problem or solution of concern to Tognazzini would be solved or improved by the combination of reference teachings proposed by the Office. The Office provides inconsistent interpretations of the prior art that it is inherent to provide the memory in the printer when such supports a rejection of claim 2 and then in the same Action takes a contrary position when such supports a rejection of claim 5. The only motivation results from improper reliance upon Applicants disclosure which is improper for a proper 103 rejection.

The Federal Circuit discussed proper motivation *In re Lee*, 61 USPQ 2d 1430 (Fed. Cir. 2002). The motivation identified in the Office Action is akin to the conclusory statements set forth in *In re Lee* which were found to fail to provide the requisite motivation to support an obviousness rejection. The Court in *In re Lee* stated the factual inquiry whether to combine references must be *thorough and searching*. It must be based *on objective evidence of record*. The Court in *In re Fritch*, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992) stated motivation is provided only by showing some *objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art* would lead that individual to combine the relevant teachings of the references. The *Lee* Court stated that the Examiner's *conclusory statements* in the *Lee* case do not adequately address the issue of motivation to combine. The Court additionally stated that the factual question of motivation is material to patentability and

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**can not be resolved on subjective belief and unknown authority.** The only motivation offered by the Office concerns solutions to problems of no concern to Tognazzini. The record is void of any evidence that solutions to problems of Tognazzini would be cured by the combination or that the operations of Tognazzini would be improved by the combination to motivate one to make the combination proposed by the Office. Applicants respectfully submit that one concerned with the problems addressed by Tognazzini would not be motivated to look to the disparate teachings of Naka not concerned with problems of Tognazzini for meaningful teachings. There is no proper motivation to support the 103 rejection and the rejection of claim 5 is improper for at least this reason.

Referring to claim 7, there is no teaching or suggestion of the suspending limitations as positively recited. The Office alleges that the operation of step 460 is not enabled to complete because the modification of prediction operations is implemented in step 420. Tognazzini fails to disclose the suspension as alleged by the Office. Following a YES at step 450 (identified by the Office as teaching the claimed change of use), the flow chart of Tognazzini performs steps 420, 430 and 440 at least some of which are identified as disclosing the prediction operations and evidencing the fact that the operations are not suspended but are fully active. Limitations of claim 7 are not disclosed nor suggested by the prior art and claim 7 is allowable for at least this reason.

Referring to claim 8, the Office relies upon the teachings of Naka to allegedly disclose the establishing confidence in the prediction operations. It is stated on page 11 of the Action that Naka discloses establishing confidence in consumable data to determine what data is correct consumable data. However, claim 8 recited establishing confidence in prediction operations. Accordingly, even if the teachings of the references are combined, positively recited limitations of establishing confidence in prediction operations is not disclosed nor suggested by the prior art's alleged establish confidence in prediction data and the Office has failed to establish a proper prima facie 103 rejection for at least this reason.

In addition, there is no motivation to modify the reference teachings. Tognazzini is void of any disclosure or suggestion of consumable memory and accordingly there is no motivation to combine reference teachings regarding verifying data in consumable memory with Tognazzini inasmuch as Tognazzini is not concerned with nor provides data in consumable memory. There is also no evidence of record that Tognazzini is

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concerned with or experiences problems in correctness of data or counter data to motivate one to implement confidence processing. The Office has failed to establish a proper prima facie 103 rejection for at least this additional reason.

Referring to claim 9, the Office inappropriately relies upon inherency in formulating the anticipation rejection. More specifically, the Office must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics necessarily flow from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). The Office has demonstrated no basis in fact or technical reasoning that the claimed verification is necessary from the teachings of Tognazzini. The verification *does not necessarily flow* from the teachings of the prior art inasmuch *as the disclosure of Tognazzini is operable without verification* and the rejection of claim 9 is improper for at least this reason.

Referring to claim 10, the method recites performing prediction operations with respect to a consumable to predict a likelihood that an image job will be imaged. Tognazzini merely discloses updating a page counter after print jobs are imaged and fails to disclose or suggest any teachings towards predicting the likelihood whether an image job will be imaged. In addition, replacement of a cartridge is not a change of use of a consumable inasmuch as replacement is not use or change of use of the consumable. Positively-recited limitations of claim 10 are not disclosed nor suggested by the prior art and claim 10 is allowable for at least this reason.

The claims which depend from independent claim 10 are in condition for allowance for the reasons discussed above with respect to the independent claim as well as for their own respective features which are neither shown nor suggested by the cited art.

Referring to claim 20, there is no motivation to combine the teachings of Naka with the teachings of Tognazzini and the rejection of claim 20 is improper for at least this reason. Initially, there is no evidence of record that Tognazzini is concerned with providing information for use in multiple printers. In addition, there is no evidence of record that Tognazzini moves consumables from printer to printer or would benefit from such movement to motivate one to store data upon a consumable for use by other multiple printers. The motivation identified by the Office is not supported by evidence of record but is rather based upon subjective opinions of the Examiner or unknown authority. In view of the above-recited MPEP authority, the Office has failed to

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establish a proper prima facie 103 rejection of claim 20 for at least this reason.

Further, claim 20 recites *setting the warning indication associated with the predictive data to indicate a change of use*. The change of use has been identified by the Office on page 3 as being taught by Tognazzini as replacement of a cartridge. There is no evidence of record that Tognazzini is concerned with defective data existing upon cartridge replacement to motivate one to provide a warning indicative of the change of use. There is no evidence of record that the combinations of prior art proposed by the Office provide solutions to problems of concern to Tognazzini to motivate one of skill in the art to combine the prior art as proposed by the Office. The 103 rejection of claim 20 is improper for the above-recited numerous reasons.

Referring to the rejection of claim 21, it is alleged on pages 8-9 of the Action that the combination of Samuels with Naka is appropriate so that the system of Samuels could benefit by including the ability to move cartridges between printers that are not completely full and still predict closely and Naka would benefit by allowing a user to be able to determine whether or not a print job could be completed without wasting toner. There is no evidence of record of that the system of Samuels is concerned with or would operate in an improved manner if it were modified to include the ability to move cartridges between printers let alone movement of already used cartridges. Further, Naka is concerned with providing precise calculations of determining ink remaining amounts. Accordingly, Naka is concerned with problems associated with inappropriately indicating ink remains when in fact it is depleted before expectation. As such, Naka is concerned with indicating too much ink remains as opposed to wasting toner/ink. Accordingly, Naka is not concerned with determining whether a print job could be completed without wasting toner or ink. There is no evidence of record to support the motivation to combine the reference teachings to reduce wasting toner or ink or that even if combined as proposed by the Office that ink or toner would not be wasted. The Office has failed to identify evidence of record to support the motivation to combine the reference teachings and the Office has failed to establish a proper prima facie 103 rejection for at least this reason. Applicants respectfully request allowance of claim 21 in the next Action for at least this reason.

Applicants hereby add new claims 22-30 which are supported at least by Figs. 2, 3A and 3B and the associated teachings of the originally filed specification.

Applicants respectfully request allowance of all pending claims.

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The Examiner is requested to phone the undersigned if the Examiner believes such would facilitate prosecution of the present application. The undersigned is available for telephone consultation at any time during normal business hours (Pacific Time Zone).

Respectfully submitted,

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